

ONBOARD SATELLITE PROCESSING TO MITIGATE DATA RECORDER LIMITS

ABSTRACT

A spacecraft (102) can include a communications receiver (210) for receiving a selected list of targets (114, 116) for which desired information is to be acquired by the spacecraft (102). In addition to location data concerning the targets, the list can also include a predetermined priority value assigned to each target on the list. The list can include data acquisition targets that collectively comprise more data than can be stored on the spacecraft's onboard solid state recorder (204). One or more computer processors (206) can be also be provided onboard the spacecraft. The processor (206) can process the acquired data onboard the spacecraft to determine whether the data contains at least a predetermined portion of the desired information and can overwrite lesser priority data (316) when the solid state recorder (204) is otherwise full.